

REMARKS

Applicant thanks the Examiner for withdrawing the specification and drawings objections of record in the June 27, 2005 *Office Action*.

Status of the Application

Claims 1-14 are all the claims pending in the Application. Claims 1-14 stand rejected. Claims 1, 2 and 3 are amended in a clarifying manner.

Claim Objections

The Examiner has objected to claim 3 for a typographical error. Applicants hereby amend independent claim 3 in an editorial, non-limiting, manner to correct the cited typographical error. Thus, Applicants respectfully request withdrawal of this objection.

Art Rejection

The Examiner has rejected: (1) claims 1, 2, 4 and 5 under 35 U.S.C. § 102(b) as being anticipated by *Glover* (US 6,052,780; hereinafter “*Glover*”); (2) claim 3 under 35 U.S.C. § 103(a) as being unpatentable over *Glover* in view of *Applied Cryptography, Second Edition* by *Schneier* (hereinafter “*Schneier*”); (3) claims 6-11 under 35 U.S.C. § 103(a) as being unpatentable over *Glover* in view of *McManis* (US 5,757,914; hereinafter “*McManis*”); (4) claims 12 and 13 under 35 U.S.C. § 103(a) as being unpatentable over *Glover* in view of *Cabrera et al.* (US 5,978,815; hereinafter “*Cabrera*”); and (5) claims 12 and 13 under 35 U.S.C. § 103(a) as being unpatentable over *Glover* in view of *McManis* in further view of *Cabrera*. These rejections are respectfully traversed.

Glover

As pointed out in the previous *Amendment*, *Glover* discloses a process to store and retrieve digital information. The information is stored in the format shown in FIG. 3 (reproduced to the right), including:

(1) an unwrap procedure 50, which is an executable program code provided to identify the locations of the other portions of the digital information (col. 9, lines 13-19);

(2) a virtual device driver 52, which is identified by the unwrap procedure 50, and which “decrypts and decodes the desired digital information such as an executable computer program code from hidden

information 54,” where the “hidden information may be any kind of digital data, such as audio, video, text, and computer program code including linked libraries or other device drivers” (col. 9, lines 20-35);

(3) labels 56, 58, 60 and 62, which “delineate the boundaries between the device driver and the hidden files” (col. 9, lines 36-50).

Accordingly, Applicants respectfully submit that the driver application 52 and “hidden information” 54 are logically separate files (e.g., they are separated at least by labels 58 and 60). Thus, the “hidden information” 54 cannot reasonably be considered to be part of the driver application 52.

Further, regarding the retrieval of the “hidden information” 54, *Glover* discloses a method shown in FIG. 4 (reproduced to the right for convenience), where:

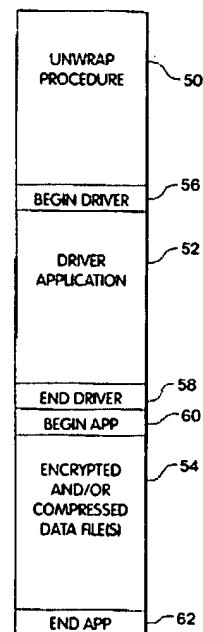


Fig. 3

(1) the program shown in FIG. 3 is loaded into memory and an unwrap procedure 50 is executed in step 70 (col. 10, lines 1-5);

(2) the unwrap procedure 50 locates the virtual device driver 52 within the computer program in step 74 (col. 10, lines 10-14);

(3) The unwrap procedure 50 locates the “hidden information” 54 within the computer program in step 74 (col. 10, lines 10-14);

(4) The virtual device driver 52 is then extracted by the unwrap procedure 50 from the computer program and loaded for use by the operating system in step 78 (col. 5, lines 13-15);

(5) the executed unwrap procedure 50, in step 80, informs the loaded virtual device driver 52 of the location of the “hidden information” 54 (col. 10, lines 18-20);

(6) various portions of the “hidden information” are retrieved by the virtual device driver 52, decrypted or decompressed, and supplied to the operating system (steps 82-90; col. 10, lines 28-45); and

(7) the program can then be deleted from memory (step 92; col. 10, lines 45-47).

Thus, during the operation of virtual device driver 52, the virtual device driver 52 does not decrypt any internal portions of its own file. Rather, virtual device driver 52 decrypts

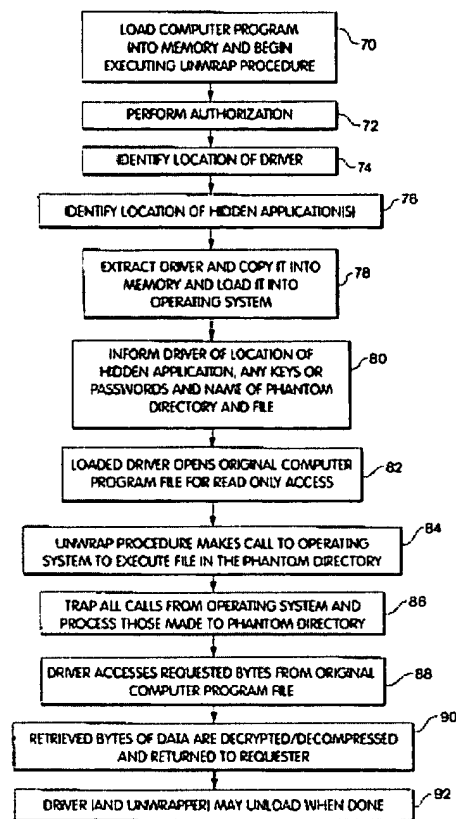


Fig.4

portions of the “hidden information” 54, which is separate from virtual device driver 52.

Further, it is easy to see that no portion of the virtual device driver 52 is “re-encrypted” after its use. Rather, it is simply deleted, as the operating system no longer needs to access the data in the “hidden information” 54.

Independent Claim 1

Regarding independent claim 1, the Examiner alleges that *Glover* discloses: (1) an encrypted program code portion of a device driver in col. 9, lines 25-35 (specifically citing the “hidden information” 54); (2) decrypting the encrypted program code portion in col. 9, lines 25-35; and (3) re-encrypting the decrypted program code portion before the driver is released in col. 10, lines 45-47 and col. 22, lines 32-36 (*O.A.*, pp. 3 and 4). Applicants respectfully disagree with each of the Examiner’s positions (1)-(3).

Regarding the Examiner’s position (1), the Examiner cites the “hidden information” 54 as somehow being equivalent to the “encrypted code portion” of the device driver. However, as discussed above, hidden information 54 is clearly not part of virtual device driver 52, since hidden information 54 is separated from virtual device driver 52 by labels 58 and 60, which are specifically indicated to “delineate the boundaries between the device driver and the hidden files” (col. 9, lines 36-50).

Regarding the Examiner’s position (2), the Examiner alleges that *Glover*’s disclosure of the virtual device driver 52 decrypting hidden information including “other device drivers” is somehow equivalent to the recited operation of “decrypting the encrypted program code portion in an initialization process of said device driver.” However, independent claim 1 specifies that “a

device driver” has an “encrypted program code portion,” and the operation of “decrypting the encrypted program code portion in an initialization process of **said device driver.**”

Thus, since the Examiner has alleged that virtual device driver 52 is somehow equivalent to the “device driver,” virtual device driver 52 must both: (1) have an encrypted program code portion; and (2) decrypt that encrypted program code portion during its initialization in order to teach or suggest the features of independent claim 1. However, *Glover* fails to teach or suggest that virtual device driver 52 performs both of these steps. Rather, as noted by the Examiner, virtual device driver does not decrypt its own code, but instead decrypts “hidden information 54,” which is not part of virtual device driver 52.

Accordingly, even though the Examiner correctly indicates that *Glover* discloses that its “hidden information” may be “other device drivers,” these are irrelevant to the features of independent claim 1, since these “other device drivers” teach nothing in particular with respect to virtual device driver 52.

Regarding the Examiner’s position (3), the Examiner alleges that *Glover*’s disclosure that the program can be deleted from memory (in col. 10, lines 45-47) or that program fragments may be re-encrypted (in col. 22, lines 32-36) is somehow equivalent to independent claim 1’s operation of “re-encrypting the executed decrypted program code portion in an end process of the device driver, in which said device driver is released.”

In contrast, as discussed above, there is no teaching or suggestion in *Glover* that virtual device driver 52 is ever re-encrypted, let alone that it is “re-encrypted ... in an end process of the device driver” as claimed. Rather, the portions cited by the Examiner disclose either that:

Glover's operative program (including virtual device driver 52) may simply be deleted from memory after use (col. 10, lines 45-47), or a vague indication that portions of the program may be re-encrypted, with no specific teaching or suggestion of when such a re-encryption might occur.

Accordingly, Applicant respectfully submits that *Glover* fails to teach or suggest independent claim 1's recitations of: (1) providing a "device driver comprising an encrypted code portion;" (2) "decrypting the encrypted program code portion in an initialization process of said device driver;" or (3) "re-encrypting the executed decrypted program code portion in an end process of the device driver, in which said device driver is released."

Thus, Applicant respectfully submits that independent claim 1 is patentable over the applied references.

Independent Claim 2

The Examiner alleges that *Glover* discloses all of the features of independent claim 2. Applicants respectfully disagree, and submit that *Glover* fails to teach or suggest: (1) providing a "device driver comprising an encrypted code portion;" (2) "decrypting the encrypted program code portion after the device driver is initialized;" and (3) "re-encrypting the executed decrypted program code portion."

Applicants respectfully submit that *Glover* fails to teach or suggest that a device driver decrypts or re-encrypts its own encrypted code portion, for at least the reasons discussed above with respect to independent claim 1.

Thus, Applicant respectfully submits that independent claim 2 is patentable over the applied references.

Independent Claim 3

The Examiner alleges that *Glover* discloses all of the features of independent claim 2. Applicants respectfully disagree, and submit that *Glover* fails to teach or suggest: (1) “providing a device driver comprising an encrypted program code portion of a main process thereof;” (2) primarily or secondarily decrypting the encrypted or decrypted program code portion; and (3) secondarily or primarily re-encrypting the decrypted or re-encrypted program code portion.

Applicants respectfully submit that *Glover* fails to teach or suggest that a device driver decrypts or re-encrypts its own encrypted code portion, for at least the reasons discussed above with respect to independent claim 1.

Further, Applicants respectfully submit that *Schneier* fails to correct the deficiencies of *Glover*, as *Schneier* fails to teach or suggest any particular features of a device driver.

Thus, Applicant respectfully submits that independent claim 3 is patentable over the applied references.

Dependent Claims 4-14

Applicant respectfully submits that rejected dependent claims 4-11 are allowable, *at least* by virtue of their dependency. Further, Applicant respectfully submits that the secondary references applied by the Examiner with respect to these claims, *McManis* and *Cabrera*, are deficient with respect to the features noted above as missing from *Glover*.

Additionally, regarding dependent claims 12-14, Applicants respectfully disagree with the Examiner's assertion that one of ordinary skill in the art at the time of the invention ("one of skill") would have been motivated to modify *Glover* in view of *Cabrera*.

Glover, as discussed in great detail above, is directed to a virtual device driver for communicating between an operating system and file system (see FIG. 7), not a device driver that operates between an application and hardware, such as is disclosed in *Cabrera*. The features of *Glover*'s virtual device driver (e.g., the decryption and decompression of the "hidden information") would be of absolutely no use in a device driver such as is disclosed by *Cabrera*, and *vice versa*.

Further, with respect to the Examiner's proffered motivation for modifying *Glover* in view of *Cabrera* (i.e., "because the ordinary person ... would have been motivated to allow the driver to perform many functions that would not be possible from user mode"), this motivation is wholly unsupported (the Examiner fails to even cite one of the references for support) by either reference.

Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Conclusion

In view of the foregoing, it is respectfully submitted that claims 1-14 are allowable. Thus, it is respectfully submitted that the application now is in condition for allowance with all of the claims 1-14.

Amendment Under 37 C.F.R. § 1.116
U.S. Application No. 10/076,404

Attorney Docket # Q68583

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any fees which may be required to maintain the pendency of this application, except for the Issue Fee, to our Deposit Account No. 19-4880.

Respectfully submitted,



Timothy P. Cremen
Registration No. 50,855

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: April 17, 2006